SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT, BAJA, CALIFORNIA, 28 JULY 1975

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Teledyne Geotech

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SDCS-ER-75-63

SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Baja California, 28 July 1975

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SDCS EVENT REPORT NO. 63

Baja California, 28 July 1975

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	"P" Arrival	Origin Time	Lat.	Long.	m_b	M_s
NORSAR	15:38:33.4	15:26:17	26 N	112 W	5.5	N/A
PDE		15:26:17.9	25.4N	109.6W	4.8	N/A

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

15:26:13.3	25.3N	109.9W	5.4	5.0

HN-ME was not operational for this period.

Short-period signals associated with this event were recorded at WH2YK, CPSO, RK-ON, FN-WV, LASA and NORSAR. WH2YK was not used in average SP magnitude calculations because the gain of the SP vertical channel was questionable. Horizontal SP channels at WH2YK, CPSO, RK-ON, and FN-WV were rotated.

Long-period signals were recorded at WH2YK, CPSO, RK-ON, FN-WV and LASA. Horizontal LP channels at WH2YK, FN-WV and CPSO were rotated. Horizontal LP channels at RK-ON were not rotated because the LP transverse channel was effectively inoperative at signal arrival time. ALPA and NORSAR long-period array data were not recoverable.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA and NORSAR short-period plots. LASA SP scaling factors are millimicrons per inch. Scaling factors are not reported for NORSAR short-period.

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES DEG MN SECS	ELEVATION METERS	INSTRUMENTATION SHORT-PERIOD	LONG-PERIOD
ALPA	Alaska	65 14 00.0 N 147 44 36.0 W	626	None	31300
CPSO	McMinnville, Tennessee	35 35 41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32 58.0 N 079 30 47.0 W	910	KS36000	KS36000
LASA	Billings, Montana	46 41 19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C H
HN-ME	Houlton, Maine	46 09 43.0 N 067 59 09.0 W	213	18300	SL210 V SL220 H
NORSAR	Kjeller, Norway	60 49 25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H
RK-ON	Red Lake, Ontario	50 50 20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41 41.0 N 134 58 02.0 W	853	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be 316° ± 5° based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INPUT FOR EVENT 28 JUI 75
15:26:00.0 23.998N 112.000W 0KM.

STA.	ARRIVAL	RESIDUALS CALC	RESIDUALS REST	DIST. REST	AZ. REST
IAC	15 31 03.8	-0.2	-0.2	21.6	7.0
CEC	15 31 22.4	0.6	0.4	23.3	58.1
ER-CN	15 32 09.3	0.3	0.4	28.4	21.9
FN-WV	15 32 12.3	-0.7	-0.8	28.9	55.3
WH2YK	15 33 43.4	0.0	-0.2	39.4	340.8
NAC	15 38 33.4	0.1	0.3	81.8	25.2

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
15:26:04.9	25.104N	110.027W	-48. CALC	0.4	4	6
15:26:13.3	25.271N	109.945W	0. REST	0.5	3	6

CALC

```
    1 . 2
  C   .   1
C    C. 2   0
. . . . . . .
C    C. 0   0
  0   .   0
    C . 0
```

REST

```
    1 . 2
  0   .   1
0    0. 2   0
. . . . . . .
C    0. 0   0
  0   .   0
    0 . 0
```

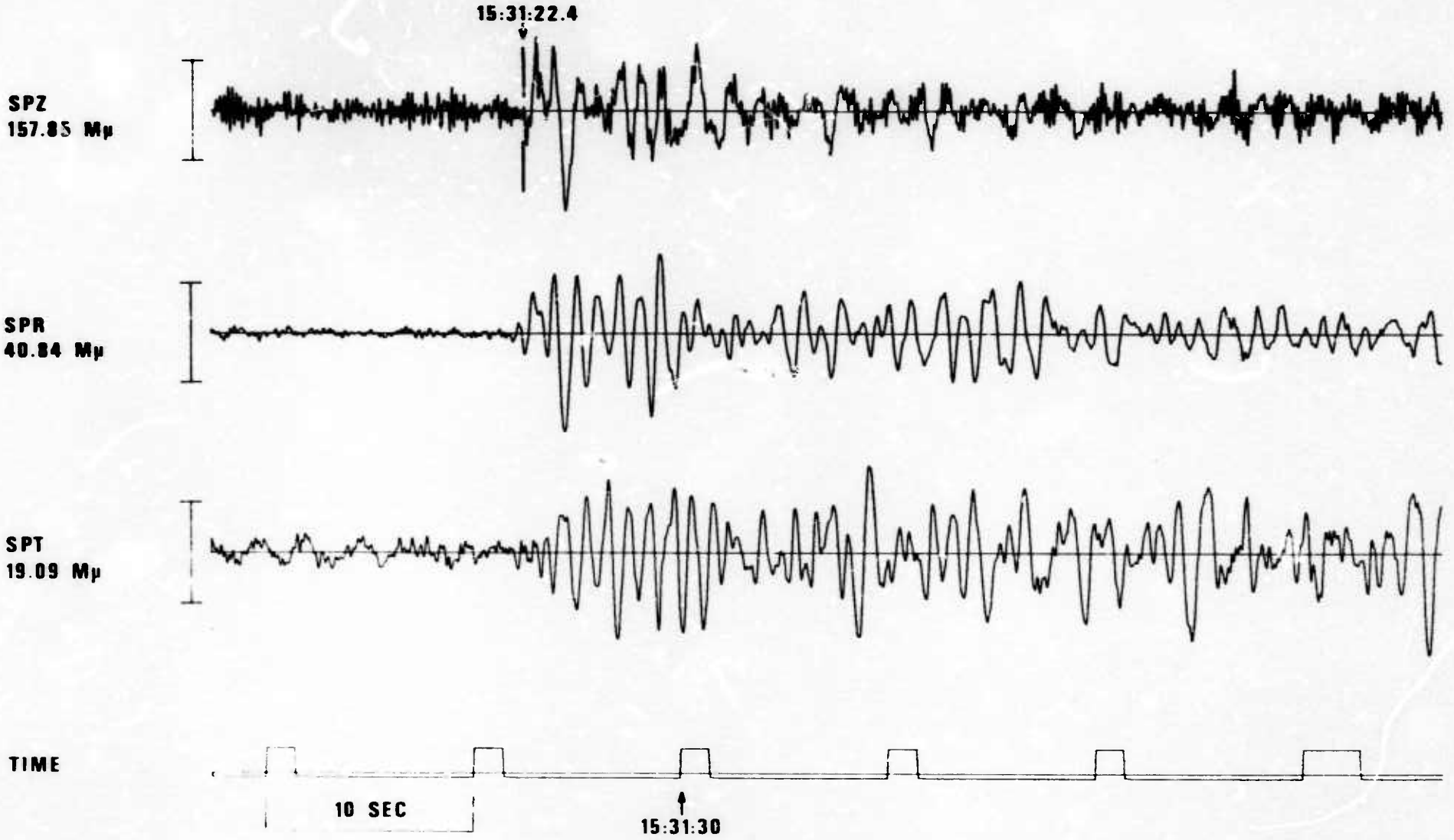
CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 1.34
MAJOR 91.5KM. MINOR 37.5KM. AZ= 22 AREA= 10770 SQ.KM. REST

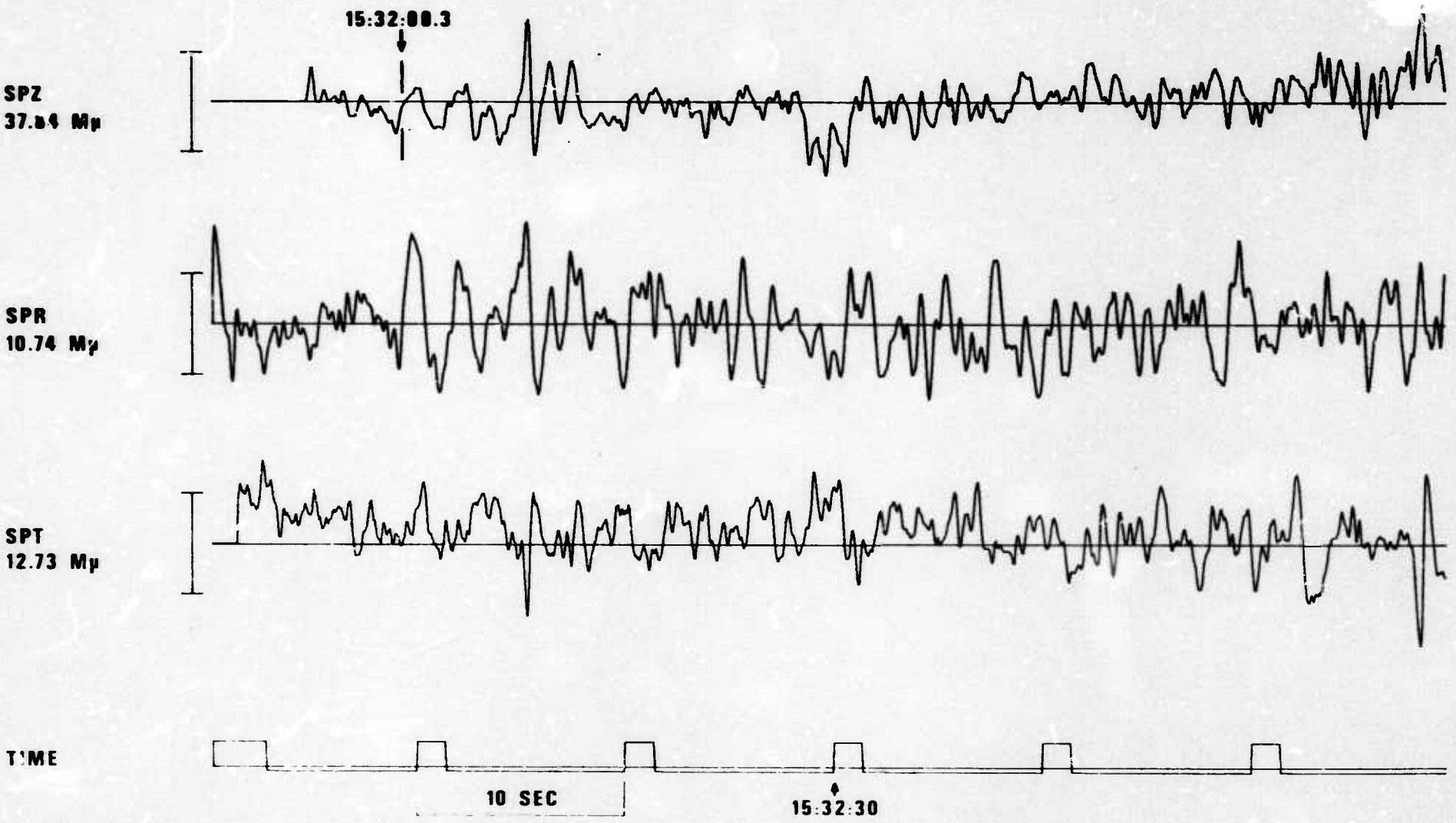
DATA SUMMARY

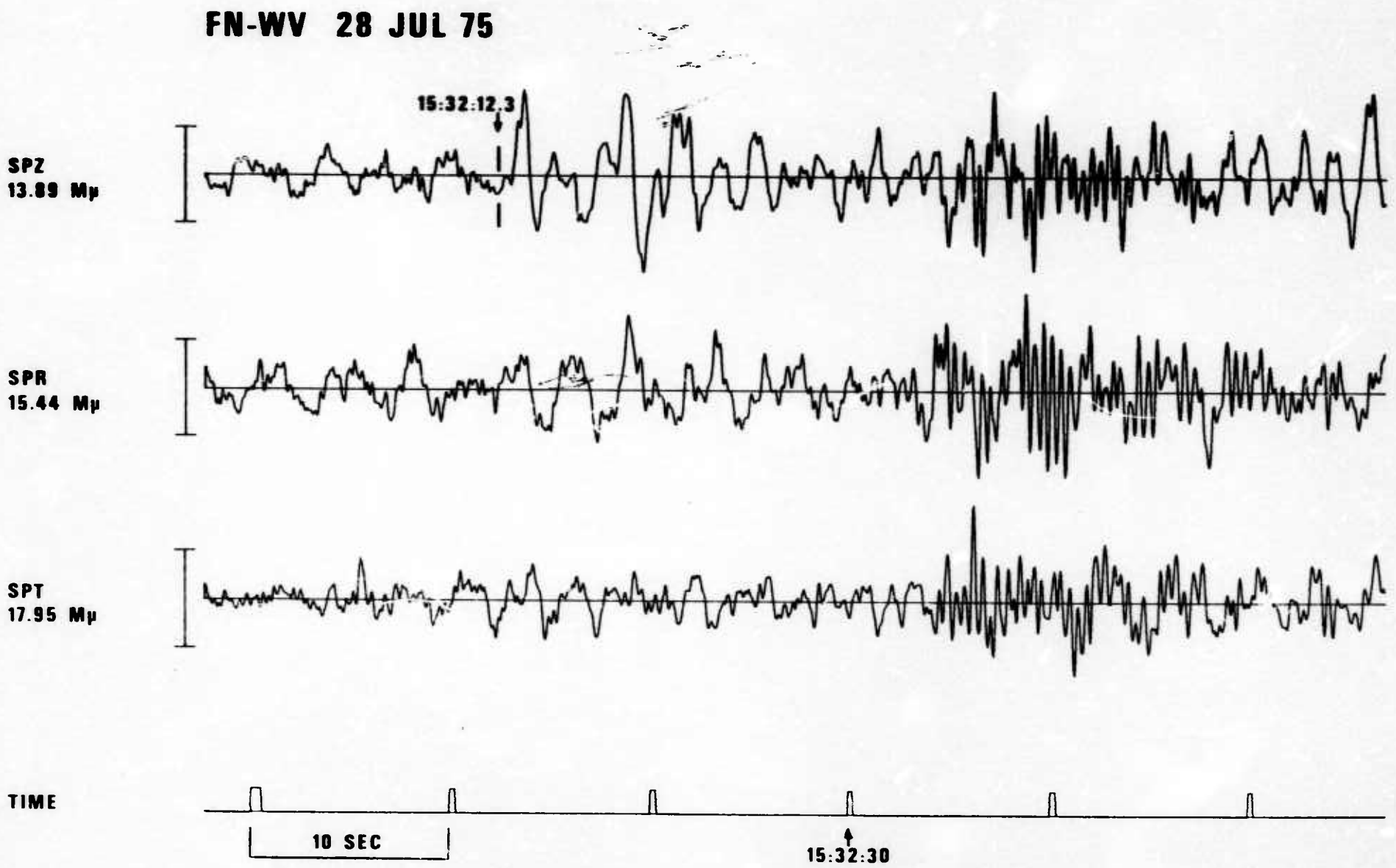
INPUT FOR EVENT 28 JUI 75
15:26:CC.0 23.598N 112.0C0W 0KM.

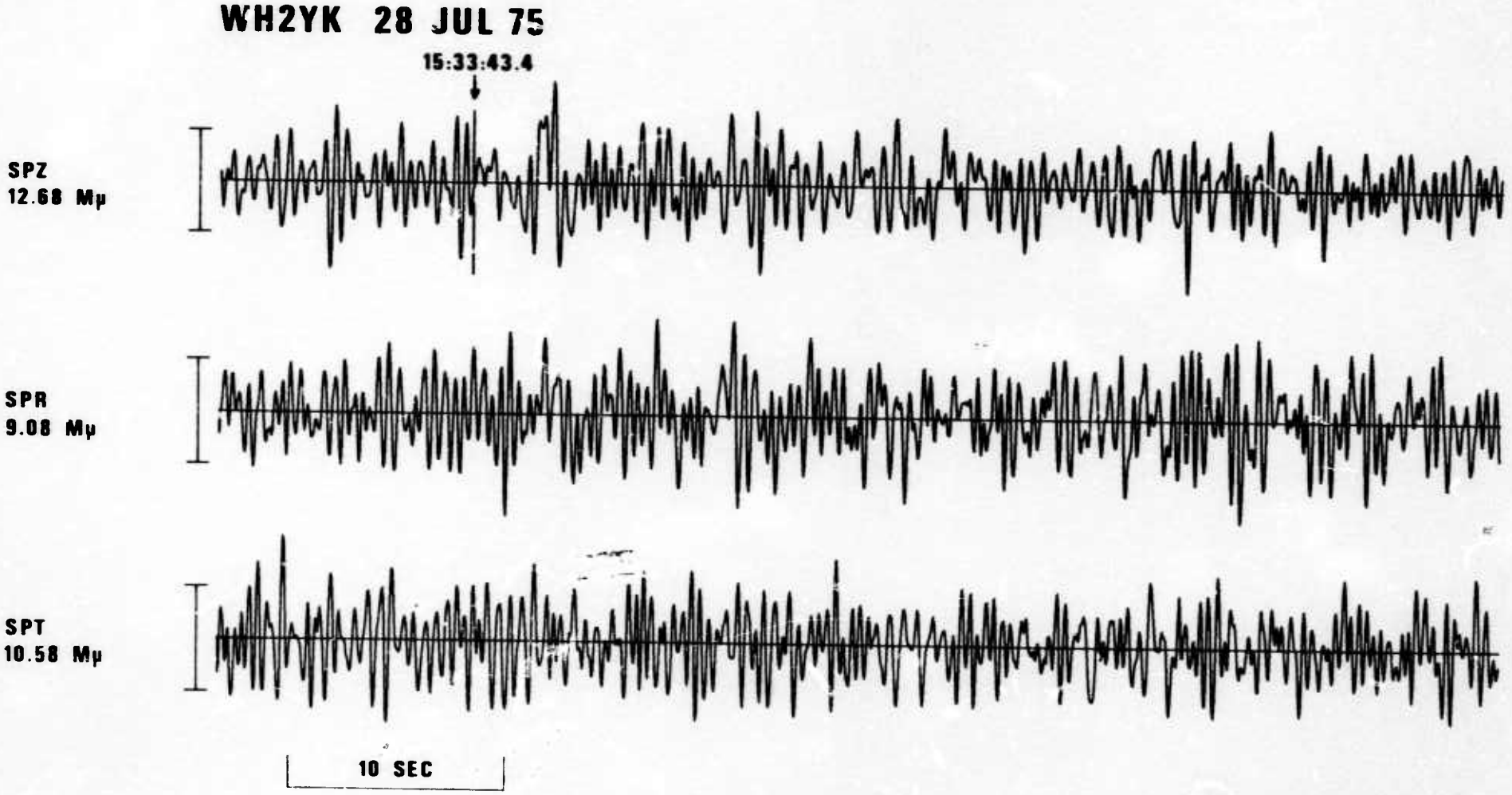
STA.	PHASE	ARRIVAL TIME	INST	PER	A/T	MAGNITUDE MB	MS	DIR	DIST
IAC	EP	15 31 C3.8	AE	1.5	585.	5.63			21.6
IAC	IC	15 38 22.0	IPE	19.0	804.				
IAC	LR	15 39 53.C	IPZ	17.C	431.		5.09		21.6
CEC	EP	15 31 22.4	SEZ	1.2	287.	5.46			23.3
CEC	IC	15 39 32.C	IPI	17.C	1944.				
CEC	LR	15 41 19.0	IPZ	17.0	730.		5.35		23.3
FK-CN	EP	15 32 09.3	SEZ	2.0	59.	5.07			28.4
FK-CN	IC	15 41 42.0	IPR	22.0	309.				
FK-CN	LR	15 43 56.C	IPZ	14.0	1621.		5.78		28.4
FN-WV	EP	15 32 12.3	SEZ	1.6	41.	4.91			28.9
FN-WV	IC	15 42 07.0	IPI	23.0	357.				
FN-WV	LR	15 43 22.0	IPZ	21.0	192.		4.86		28.9
WH2YK	EP	15 33 43.4	SEZ	0.6	9999.				
WH2YK	IC	15 48 01.C	IPI	19.0	322.				
WH2YK	LR	15 50 54.0	IPZ	17.0	111.		4.76		39.4
NAC	EP	15 38 33.4	AE	2.2	242.	5.96			81.8

ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA	IPMAG	IPSDV	IPSTA
15:26:04.9	25.104N	110.C27W	0. CAIC	5.41	0.43	5	5.02	0.3	4
15:26:13.3	25.271N	109.945W	C. REST	5.41	0.42	5	5.02	0.3	4

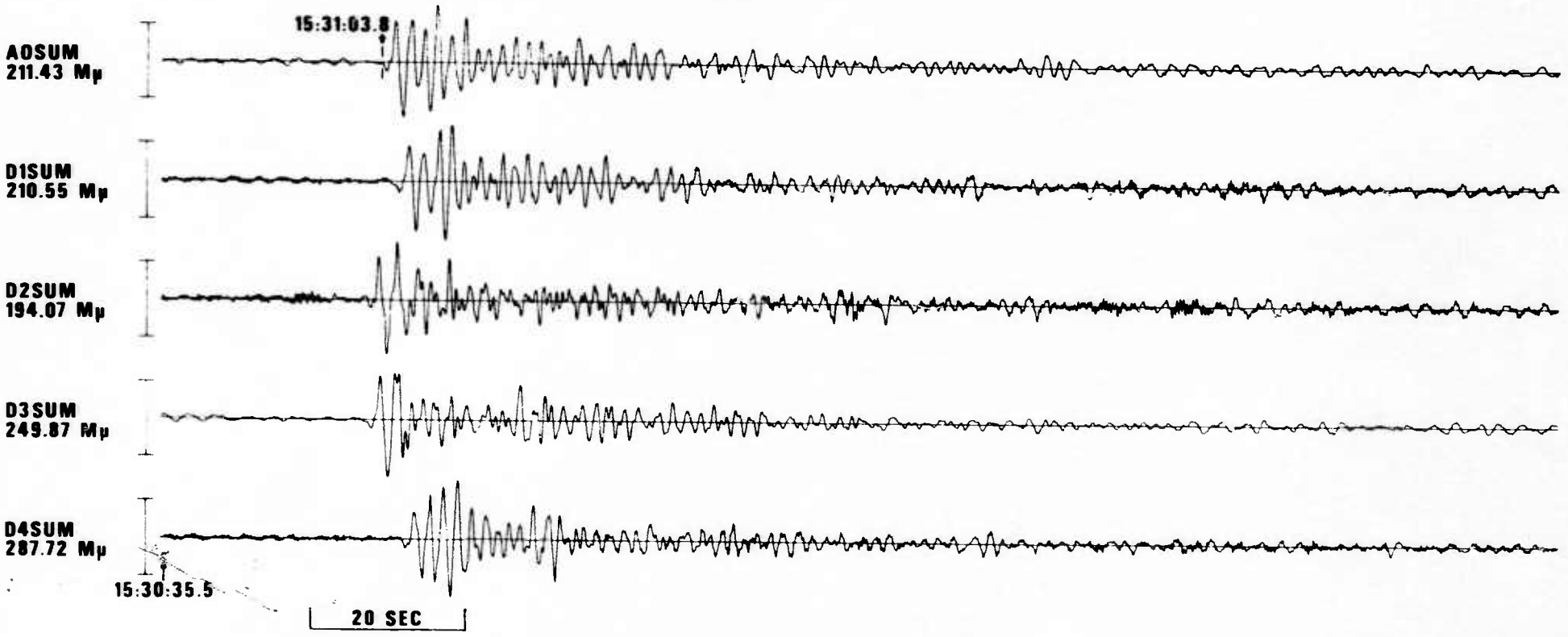

CPSO 28 JUL 75
15:31:22.4
SPZ
157.85 Mμ
SPR
40.84 Mμ
SPT
19.09 Mμ
TIME
10 SEC
15:31:30


RK-ON 28 JUL 75
15:32:00.3
SPZ
37.84 Mμ
SPR
10.74 Mμ
SPT
12.73 Mμ
TIME
10 SEC
15:32:30


FN-WV 28 JUL 75
15:32:12.3
SPZ
13.89 Mμ
SPR
15.44 Mμ
SPT
17.95 Mμ
TIME
10 SEC
15:32:30


WH2YK 28 JUL 75
15:33:43.4
SPZ
12.68 Mμ
SPR
9.08 Mμ
SPT
10.58 Mμ
10 SEC

LASA INFINITE VELOCITY SUBARRAY SUMS 28 JUL 75

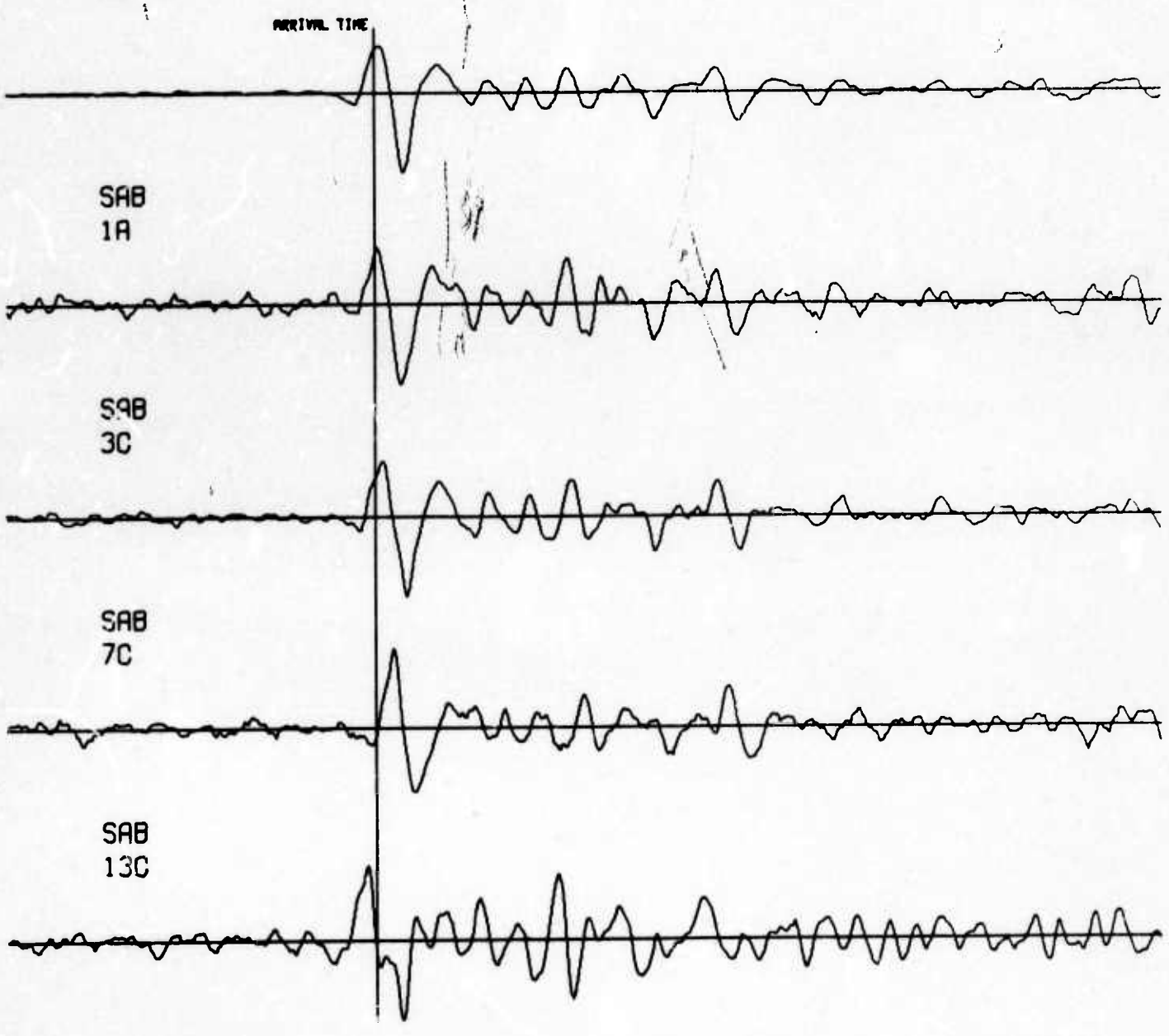


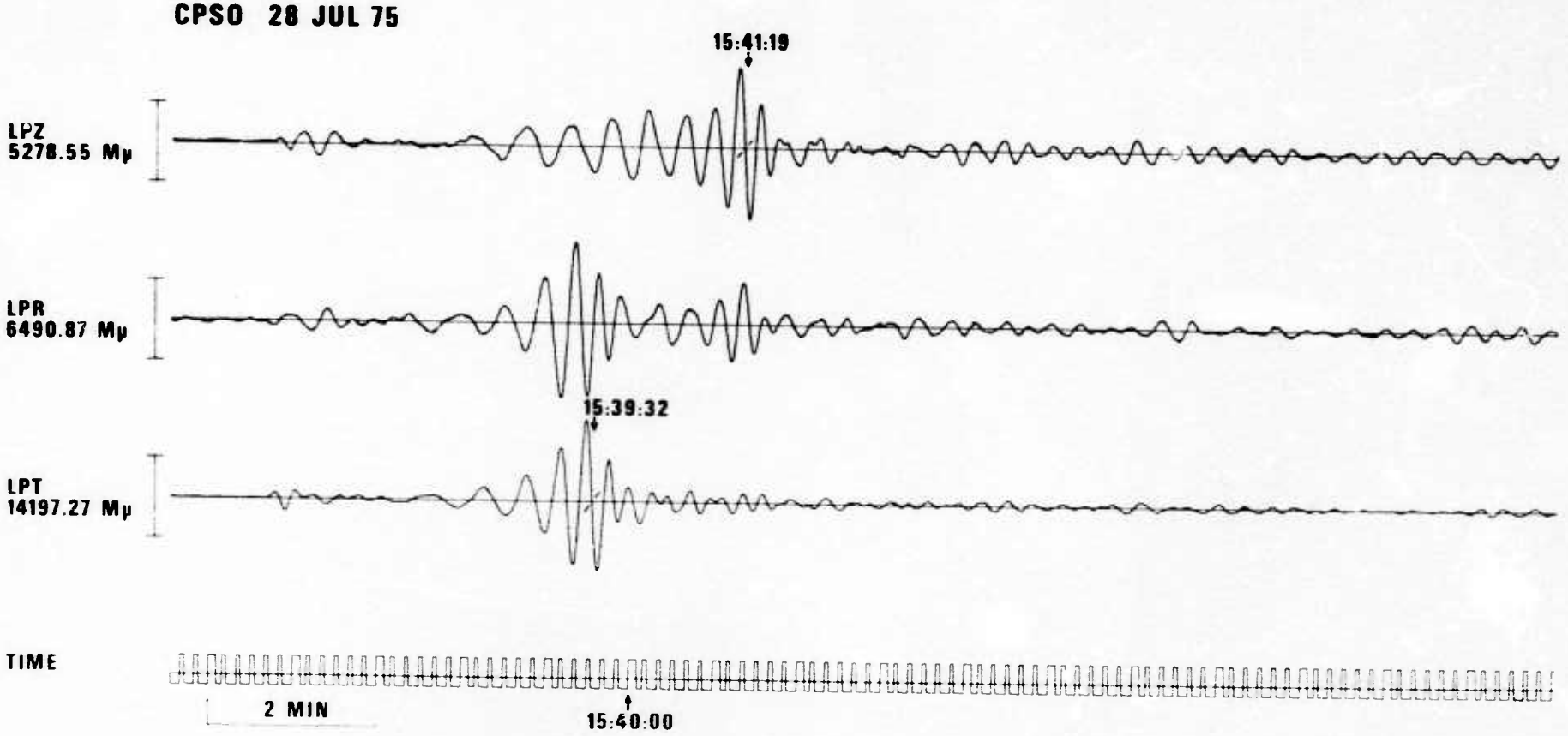
NORSAR EVENT FILE 1975 JUL 28

EPX NO. 66470 ARR. 15:38:34.8 18.1N 115.3W 4.9 MB

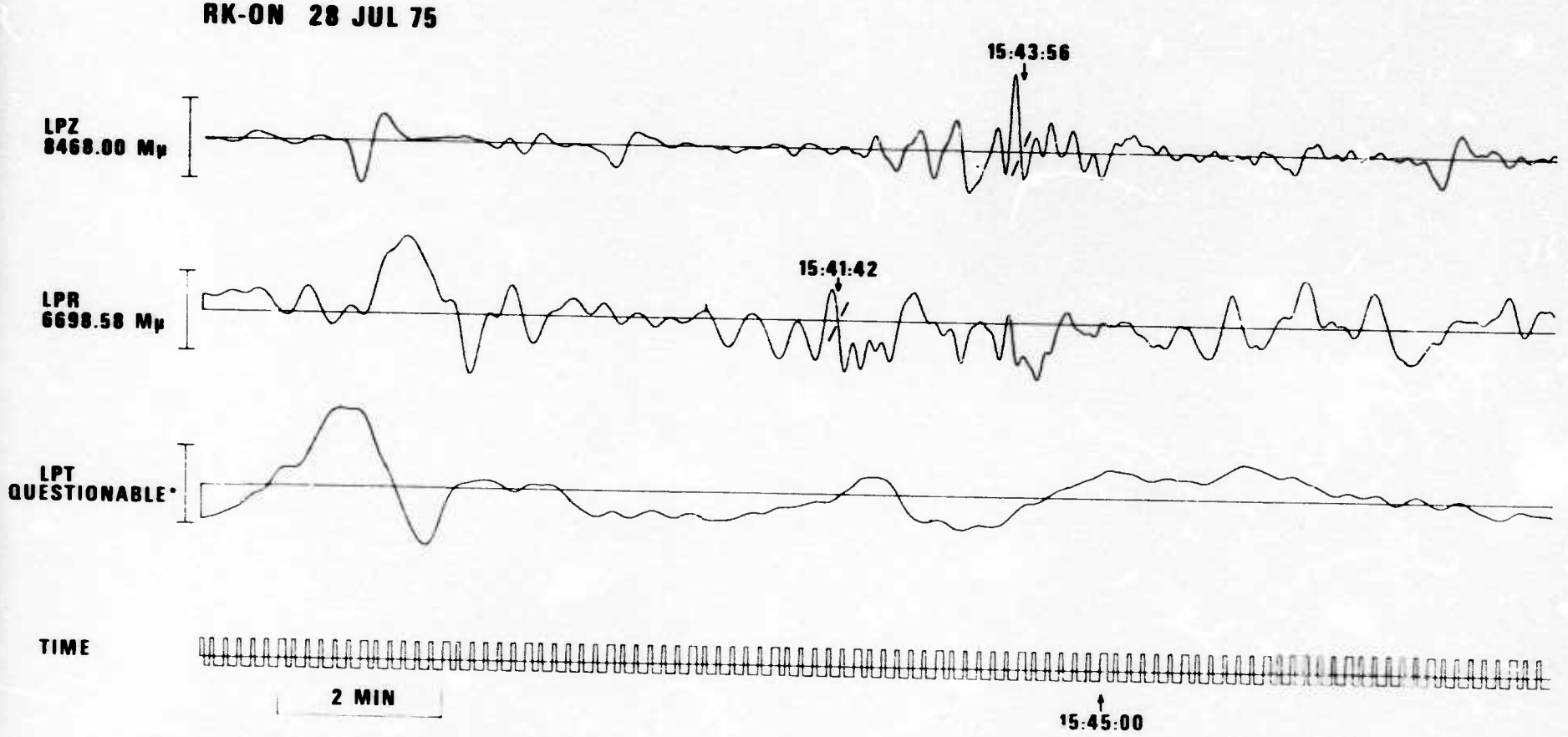
AZI = 45.1 AMP = 11.7 PER = 1.7

= 5 SECONDS

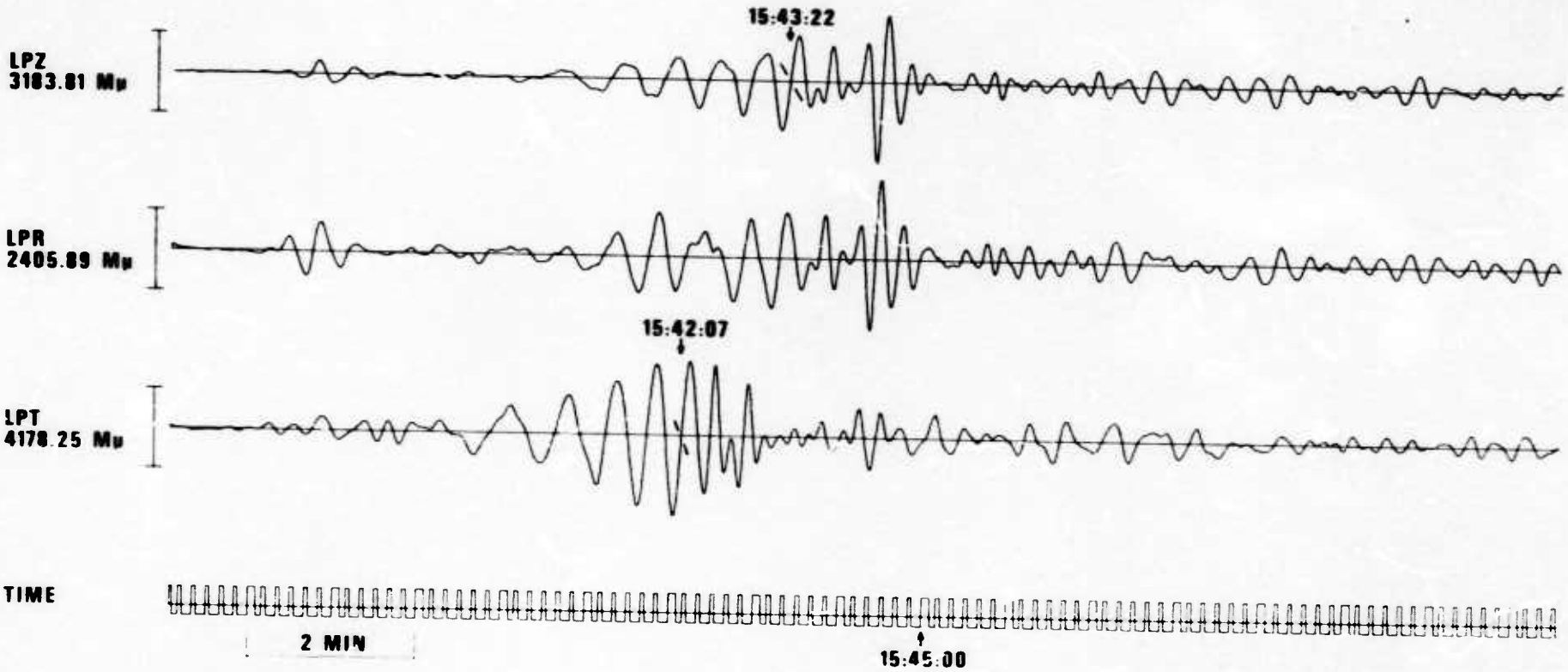


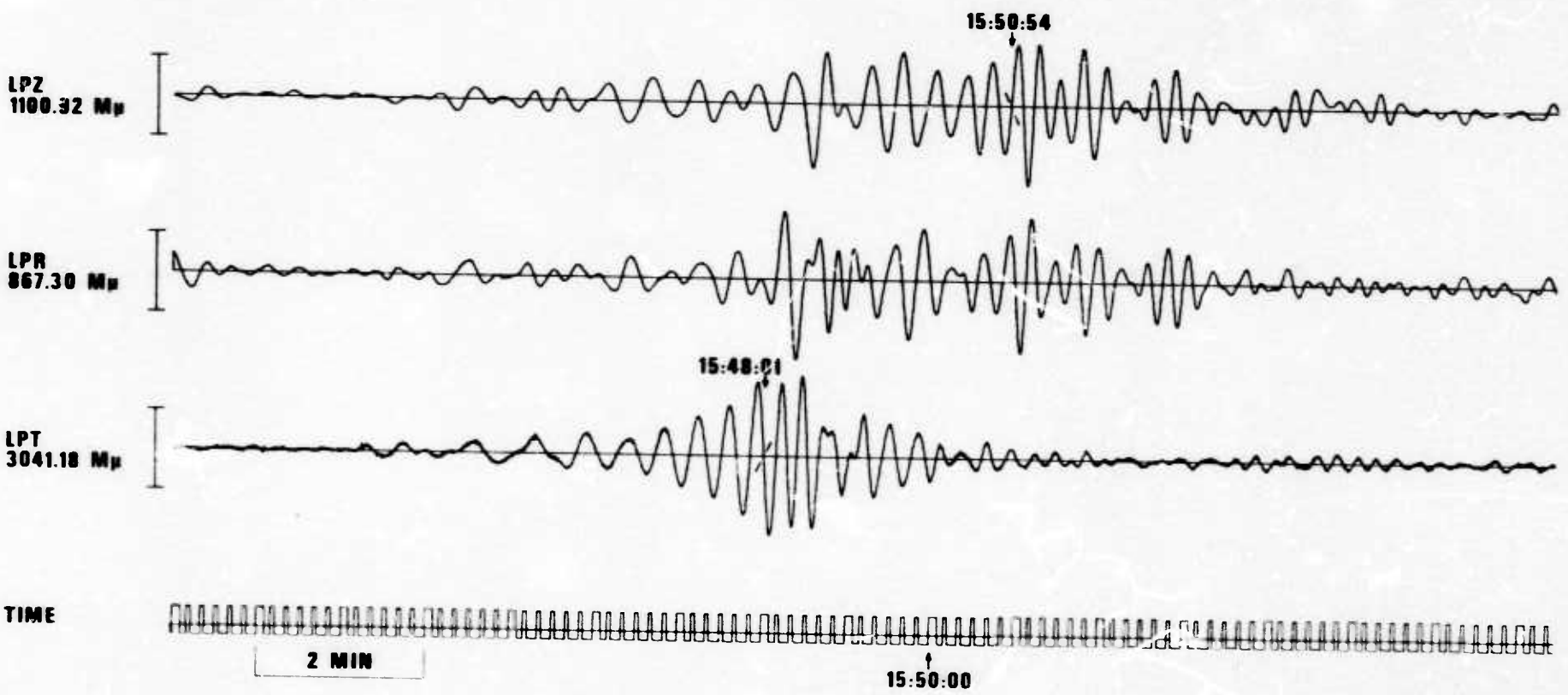

CPSO 28 JUL 75
15:41:19
LPZ
5278.55 Mμ
LPR
6490.87 Mμ
15:39:32
LPT
14197.27 Mμ
TIME
2 MIN
15:40:00

12



*INSTRUMENT NOT RESPONDING PROPERLY


FN-WV 28 JUL 75
15:43:22
LPZ
3183.81 Mμ
LPR
2405.89 Mμ
15:42:07
LPT
4178.25 Mμ
TIME
2 MIN
15:45:00


WH2YK 28 JUL 75
15:50:54
LPZ
1100.32 Mμ
LPR
867.30 Mμ
15:48:01
LPT
3041.18 Mμ
TIME
2 MIN
15:50:00

LASA LONG PERIOD C4 SUBARRAY 28 JUL 75